

WHAT IS CLAIMED IS:

1. A system for selecting open shortest path first (OSPF)
2 aggregates, comprising:

3 a database for containing data pertaining to candidate OSPF
4 aggregates and corresponding weights; and
5 an aggregate selector, associated with said database, that
6 selects at least a subset of said OSPF aggregates such that said
7 shortest path length between said particular source and
8 destination subnets resulting from advertisement of a set of
9 weighted aggregates approaches said shortest path length between
10 said particular source and destination subnets irrespective of
11 said advertisement.

2 2. The system as recited in Claim 1 wherein said aggregate
3 selector treats errors in said shortest path length as having
unequal degrees of importance.

3. A method of selecting open shortest path first (OSPF)
2 aggregates, comprising:

3 storing data pertaining to candidate OSPF aggregates and
4 corresponding weights; and

5 selecting at least a subset of said OSPF aggregates such
6 that said shortest path length between said particular source and
7 destination subnets resulting from advertisement of a set of
8 weighted aggregates approaches said shortest path length between
9 said particular source and destination subnets irrespective of
10 said advertisement.

4. The method as recited in Claim 3 wherein said selecting
2 comprises treating errors in said shortest path length as having
3 unequal degrees of importance.

5. An autonomous network domain, comprising:

2 a plurality of routers and interconnecting segments that

3 cooperate to form subnets and paths therebetween; and

4 a system for selecting open shortest path first (OSPF)

5 aggregates, including:

6 a database for containing data pertaining to candidate

7 OSPF aggregates and corresponding weights, and

8 an aggregate selector, associated with said database,

9 that selects at least a subset of said OSPF aggregates such

10 that said shortest path length between said particular

11 source and destination subnets resulting from advertisement

12 of a set of weighted aggregates approaches said shortest

13 path length between said particular source and destination

14 subnets irrespective of said advertisement.

6. The domain as recited in Claim 5 wherein said aggregate

2 selector treats errors in said shortest path length as having

3 unequal degrees of importance.

7. A system for selecting open shortest path first (OSPF)
2 aggregate weights for a particular area, comprising:

3 a database for containing data pertaining to candidate OSPF
4 aggregates; and

5 a weight assigner, associated with said database, that
6 assigns, for said OSPF aggregates, weights based on an average
7 distance of subnets in said area for a particular area border
8 router (ABR) of said area.

8. The system as recited in Claim 7 wherein said weight
2 assigner employs a search heuristic to assign said weights.

9. The system as recited in Claim 7 wherein said weight
2 assigner treats errors in path lengths in said area as having
3 unequal degrees of importance.

10. A system for selecting open shortest path first (OSPF)

2 aggregate weights for a particular area, comprising:

3 a database for containing data pertaining to candidate OSPF

4 aggregates; and

5 a weight assigner, associated with said database, that

6 employs a search heuristic to assign weights for said OSPF

7 aggregates.

11. The system as recited in Claim 10 wherein said weight

2 assigner treats errors in path lengths in said area as having

3 unequal degrees of importance.

12. A method of selecting open shortest path first (OSPF)

2 aggregate weights for a particular area, comprising:

3 storing data pertaining to candidate OSPF aggregates in a
4 database; and

5 assigning, for said OSPF aggregates, weights based on an
6 average distance of subnets in said area for a particular area
7 border router (ABR) of said area.

13. The method as recited in Claim 12 wherein said

2 assigning comprises employing a search heuristic.

14. The method as recited in Claim 12 wherein said
2 assigning comprises treating errors in path lengths in said area
3 as having unequal degrees of importance.

15. A method of selecting open shortest path first (OSPF)

2 aggregate weights for a particular area, comprising:

3 storing data pertaining to candidate OSPF aggregates in a
4 database; and

5 employing a search heuristic to assign weights for said OSPF
6 aggregates.

16. The method as recited in Claim 15 wherein said

2 employing comprises treating errors in path lengths in said area
3 as having unequal degrees of importance.

17. An autonomous network domain, comprising:
2 a plurality of routers and interconnecting segments that
3 cooperate to form subnets and paths therebetween; and
4 a system for selecting open shortest path first (OSPF)
5 aggregate weights for a particular area in said domain,
6 including:
7 a database for containing data pertaining to candidate
8 OSPF aggregates, and
9 a weight assigner, associated with said database, that
10 assigns, for said OSPF aggregates, weights based on an
11 average distance of said subnets in said domain for a
12 particular area border router (ABR) of said area.

18. The domain as recited in Claim 17 wherein said weight
2 assigner employs a search heuristic to assign said weights.

19. The domain as recited in Claim 17 wherein said weight
2 assigner treats errors in path lengths in said area as having
3 unequal degrees of importance.

20. An autonomous network domain, comprising:

2 a plurality of routers and interconnecting segments that

3 cooperate to form subnets and paths therebetween; and

4 a system for selecting open shortest path first (OSPF)

5 aggregate weights for a particular area in said domain,

6 including:

7 a database for containing data pertaining to candidate

8 OSPF aggregates, and

9 a weight assigner, associated with said database, that

10 employs a search heuristic to assign weights for said OSPF

11 aggregates.

21. The domain as recited in Claim 20 wherein said weight

2 assigner treats errors in path lengths in said area as having

3 unequal degrees of importance.